



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

50

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,493	01/17/2001	Arthur Charles Thomas Huston	50269-0039	7203
29989	7590	04/14/2005	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP			NAJJAR, SALEH	
2055 GATEWAY PLACE			ART UNIT	PAPER NUMBER
SUITE 550			2157	
SAN JOSE, CA 95110				

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/764,493	THOMAS HUSTON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Saleh Najjar	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 January 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-70 and 77-90 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 71-76 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

Art Unit: 2157

1. This action is responsive to the RCE amendment filed on January 24, 2005. Claims 1, 13, 25, 37, 49, 59, 69-70, 77-79, and 90 were amended. Claims 71-76 are subject to restriction/election and stand as non-elected claims. Claims 1-70, and 77-90 are pending examination.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-70, and 77-90 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The independent claims were amended to include the limitation of "in response to detecting, independent of any request for the data, that the second more recent version of the data is available, and requesting the second more recent version of the data be supplied to the cache". This new functionality was not described as so in the specification. Particularly, when reading pages 13-14 of the specification, the differencing engine always inquires about newer versions based on the cached versions that were previously requested.

Claims 1-70, and 77-90 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The newly added functionality of "in response to detecting, independent of any request for the data, that the second more recent version of the data is available, and requesting the second more recent version of the data be supplied to the cache" was not described in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-70, and 77-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the claimed limitation of "in response to detecting that the second more recent version of the data is available, and requesting the second more recent version of the data be supplied to the cache" is performed independent of any request for that data.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4-5, 7-8, 10, 13, 17, 19-20, 22, and 69-70 are rejected under 35 U.S.C. 102(e) as being anticipated by Keesey et al., U.S. Patent No. 6,622,167.

Keesey teaches the invention as claimed including a document shadowing intranet server for passive and active update of requested versions of documents (see abstract).

As the examiner best understands claim 1, Keesey teaches a method for managing data stored in a cache comprising the computer implemented steps of:

providing a first version of data in response to receiving a first request for data (see figs. 2-4; col. 6, lines 1-45, Keesey discloses that a first version of a document requested is served to the client);

detecting, independent of any request for the data, that a second more recent

version of the data is available (see col. 7, lines 25-30, Keesey discloses that a request for more recent versions of the document are requested from the origin server, **new versions could be pushed downstream to any DSS that has previously requested the document independently of the user request and inquiry processes discussed in figs. 4-6**);

in response to detecting, independent of any request for the data, that the second more recent version of the data is available, requesting the second more recent versions of the data be supplied to the cache, and storing in the cache the second more recent version of the data (see col. 7, lines 1-30, Keesey discloses that a more recent version of the documents cached are requested and stored in the cache server, **new versions could be pushed downstream to any DSS that has previously requested the document independently of the user request and inquiry processes discussed in figs. 4-6**);

receiving a second request for the data; and in response to receiving the second request for the data, retrieving the second more recent version of the data from the cache, and providing the second more recent version of the data (see col. 7, Keesey discloses that responses for requests for a document include the recent version of the document).

As to claim 4, Keesey teaches the method as recited in Claim 1, further comprising the step of:

if the second more recent version of the data cannot be retrieved and stored in the cache, then after a specified period of time, attempting to again retrieve and store in the cache the second more recent version of the data (see col. 7, Keesey discloses that in active mode, the cache server makes attempts periodically to retrieve more recent versions of the documents cached).

As to claim 5, Keesey teaches the method as recited in Claim 1, further comprising the step of if, after expiration of a specified period of time from a time when the second more recent version of the data is stored in the cache, no further requests for the second more recent version of the data are received, then deleting the second more recent version of the data from the cache (see col. 7, lines 55-65, Keesey

discloses that after a certain time when documents are not requested they are removed from cache).

As to claim 7, Keesey teaches the method as recited in Claim 1, further comprising providing data that indicates whether the second more recent version of the data was successfully retrieved and stored in the cache (see col. 7, lines 30-45).

As to claim 8, Keesey teaches the method as recited in Claim 1, further comprising causing a copy of the second more recent version of the data to be stored at the second cache (see col. 7, Keesey discloses that the recent version of the document is propagated to the lower level cache servers).

As to claim 10, Keesey teaches the method as recited in Claim 1, further comprising generating, based upon a set of logging criteria, log data that indicates one or more activities of the cache (see col. 6-7, Keesey discloses that usage counts are updated at the cache servers).

Claims 13, 17, 19-20, 22, and 69-70 do not teach or define any new limitations above claims 1, 4-5, 7-8, 10 and therefore are rejected for similar reasons.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-3, 6, 9, 11-12, 14-15, 18, 21, 23-69, and 77-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keesey et al., U.S. Patent No. 6,622,167.

Keesey teaches the invention substantially as claimed including a document shadowing intranet server for passive and active update of requested versions of documents (see abstract).

As to claim 2, Keesey teaches the method as recited in Claim 1, further

comprising the step of replacing the first version of the data in the cache (see col. 7, Keesey discloses that the older version of data is replaced by the newer version of data).

Keesey does not explicitly teach the limitation of deleting the first version of data. Keesey does teach that the first version of data is replaced by the second version of data (see col. 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the replacement of the first version of data as deleting the first version of data since the same functionality of deleting the first version of data is achieved.

As to claim 3, Keesey teaches the method as recited in Claim 2, further comprising the steps of storing, in a location other than the first cache, a request to requests for newer version of the data from the cache, and if the request for newer version of the data from the cache cannot be successfully processed, then after expiration of a specified period of time, retrieving from the location other than the first cache, the request for newer version of the data from the cache, and processing again the request to for newer version of the data from the cache (see col. 6-7, Keesey discloses that requests for newer versions of data are propagated upstream to the second cache server DSS and upon servicing the requests, the first version of data is replaced by the newer version of data)).

Keesey fails to teach the claimed limitation of a "request to delete the first version of data". Keesey does teach that requests for newer versions of data are propagated upstream to the second cache server DSS and upon servicing the requests, the first version of data is replaced by the newer version of data (see col. 6-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the requests for newer versions of data as the requests for deleting the first version of data since the same functionality of deleting the first version of data is achieved.

As to claim 6, Keesey teaches the method as recited in Claim 1, further comprising the steps of storing, in a location other than the first cache, a request to

retrieve and store in the cache the second more recent version of the data, and if the request to retrieve and store in the cache the second more recent version of the data cannot be processed successfully, then after queuing the request for a specified period of time, retrieving from the location other than the first cache, the request to retrieve and store in the cache the second more recent version of the data, and processing the request to retrieve and store in the cache the second more recent version of the data (see col. 7, lines 30-50, Keesey discloses that requests for recent versions of data are propagated upstream and queued for servicing).

Keesey does not explicitly teach the claimed limitation of an "expiry" of a specified time period. Keesey teaches that requests for recent versions of data are propagated upstream and queued for servicing.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the queuing of requests for newer versions of data to the upstream servers and Internet as a specified "expiry period" since the same functionality of implementing a wait time is achieved.

As to claim 9, Keesey teaches the method as recited in Claim 1, wherein the step retrieving and storing in the cache the second more recent version of the data is performed in response to processing one or more requests from an entity.

Keesey fails to teach the term "authorized entity".

However, "Official Notice" is taken that the concept and advantages of servicing requests from an authorized entity is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the clients as an authorized entity so that only certain users are served data requests.

As to claim 11, Keesey teaches the method as recited in Claim 10, wherein the set of logging criteria includes the presence of the first version of data provided (see col. 7).

Keesey does not explicitly teach the limitation wherein logging criteria includes the "size" of data requested.

However, "Official Notice" is taken that the concept and advantages of using the

size of the data requested as a logging criteria by the cache servers is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the size of the data as the logging criteria. One would be motivated to do so to take into consideration network bandwidth when moving large data files across the Intranet.

As to claim 12, Keesey teaches the method as recited in Claim 10, wherein the set of logging criteria includes presence of the first version of data.

Keesey does not explicitly teach the limitation wherein logging criteria includes the amount of time required to provide data requested.

However, "Official Notice" is taken that the concept and advantages of using the an amount of time required to provide the data requested as a logging criteria by the cache servers is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the amount of time required to provide the data as the logging criteria. One would be motivated to do so to take into consideration network delay when moving large data files across the Intranet.

Claims 14-15, 18, 21, 23-69 do not teach or define any new limitations above claims 2-3, 6, 9, 11-12 and therefore are rejected for similar reasons

Claims 77-90 are rejected for similar reasons as the rejected claims above.

Regarding claims 77-78, Keesey does not explicitly teach the limitation of a "traffic server".

Keesey does teach that document shadowing servers DSS are used as intermediaries between the client and the source server (see fig. 2; col. 6-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the document shadowing servers DSS as traffic servers since the same functionality of implementing an intermediary caching system is achieved.

Regarding claims 79-90, Keesey does not explicitly teach the claimed limitation of a "differencing mechanism".

Keesey does teach a document shadowing program 34 configures the DSS to implement the functionality of the claims above (see col. 5-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Keesey by specifying the document shadowing program 34 as the differencing mechanism since the same functionality of requesting newer versions of documents independent of requests for the documents is achieved.

8. Applicant's arguments filed January 24, ,2005 have been fully considered but they are not persuasive.

In the remarks, the applicant argues in substance that the Keesey reference does not teach "detecting, independent of any request for the data, that a second more recent version of the data is available, in response to detecting, independent of any request for the data, that the second more recent version of the data is available, requesting the second more recent versions of the data be supplied to the cache, and storing in the cache the second more recent version of the data.

In response, the above limitation was not described in the specification, particularly and with reference to pages 13-14 of the specification, the differencing engine always inquires as to the newer versions based on the older versions that previously have been requested, nevertheless, as best understood by the examiner, this functionality is taught by Keesey since it is disclosed that a request for more recent versions of the document are requested from the origin server, **new versions could be pushed downstream to any DSS that has previously requested the document independently of the user request and inquiry processes discussed in figs. 4-6** (see col. 7, lines 25-30,).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is **(571)272-4006**. The examiner can normally be reached on Monday - Friday 6:00am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Saleh Najjar

Primary Examiner/Art Unit 2157